

Amendment Under 37 C.F.R. § 1.111  
USSN 10/782,841  
Attorney Docket Q79558  
March 1, 2005

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

- 1-7. (Canceled)
8. (New) An angle sensor:  
  
a cylindrical magnet whose one semi-circle magnetizing to a N pole, and whose another semi-circle magnetizing to a S pole;  
  
a magnetoelectric conversion element relatively rotated with the cylindrical magnet; and  
  
a correction part provided on an outer circumferential surface of the cylindrical magnet to correct axial magnetic flux density distribution.
9. (New) An angle sensor according to Claim 8, wherein the correction part is a groove formed in consonance with circumference in the axial direction central part of the cylindrical magnet.
10. (New) An angel sensor according to Claim 9, wherein the groove is shaped as a rectangular groove.
11. (New) An angle sensor according to Claim 9, wherein the groove is shaped as a semi-circular groove.
12. (New) An angle sensor according to Claim 9, wherein the groove is shaped as a V groove.

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13. (New) An angle sensor according to Claim 2, wherein the correction part includes two cylindrical yokes which are disposed on outer circumferential surface of the cylindrical magnet at a cylindrical space therebetween.

14. (New) An angle sensor according to Claim 8, wherein the magnetoelectric conversion element is disposed at a center of the rotation axis.